JIMMA UNIVERSITY

COLLEGE OF PUBLIC HEALTH AND MEDICAL SCIENCE

DEPARTMENT OF HEALTH PLANNING AND MANAGEMENT

PATIENTS SATISFACTION IN OUTPATIENT MEDICAL SERVICES AND ASSOCIATED FACTORS IN PUBLIC HEALTH CENTERS ,OF METTU RURAL WOREDA, ILUBABOR ZONE ,OROMIA REGION SOUTH WEST ETHIOPIA.

BY

Samson Mengesha (BSC)

A THESIS REPORT TO BE SUBMITTED TO JIMMA UNIVERSITY COLLEGE OF PUBLIC HEALTH AND MEDICAL SCIENCES DEPARTMENT OF HEALTH SERVICE MANAGEMENT IN PARTIAL FULFILLMENT FOR DEGREE OF MASTER OF PUBLIC HEALTH

January, 2014

Jimma,Ethiopia

Patients Satisfaction in Outpatient Medical Services and Associated Factors in Public Health Centers of Mettu Rural woreda, Ilubabor Zone Oromia Region, South West Ethiopia.

BY

Samson Mengesha (Bsc)

ADVISORS

1. Mr.Waju B. (BSc, MPH)
2. Mr. Fikru Tafese (BSc, MPH)

January, 2014

Jimma, Ethiopia

Acknowledgements

I would like to thank my advisors for their grateful advises and providing me constructive information and comments. I would also like to thank Jimma University, Research and Publication Office, for providing me this chance to conduct this study and last but not the least, my special thanks also go to participants willing to involve in the study and Mettu rural woreda staffs for providing me different information which are used for conducting my thesis report.

Abstract

Back ground-Satisfaction is one of the meaningful indicators of patient experience of health care services. Asking patients what they think about the care and treatment they have received is an important step towards improving the quality of care, and to ensuring that local health services are meeting patients' needs. Primary health care facilities are the first point of contact in health services organization. Therefore without appropriate consumer satisfaction the utilization of those facilities severely limited particularly in rural areas.

Objective:- to asses patient satisfaction and associated factors among medical outpatients in public health centers of Mettu Rural Woreda,Oromiya Region South West Ethiopia.

Methods-Facility based cross sectional study using quantitative and qualitative method of data collection was conducted from September to October 2013 in Mettu Rural Woreda,Ilubabor Zone,Oromia region, Southwest Ethiopia . For quantitative data, 396 subjects were selected and allocated to each facility based on proportion of patients served last year on the same month. For qualitative part 52 participants were involved. Consecutive patients fulfilling the inclusion criteria were selected and interviewed after verbal consent was obtained from them. Data were collected using structured questionnaire and analyzed by SPSS for windows version 16.0.Statistical tests such as bivariate and multivariate logistic regression were employed to measure the association between Socio-demographic variables, different service characteristics and patient satisfaction. In bivariate analysis variables that are significant at p-value of 0.25 were selected as a candidate. And multivariate logistic regression at 95% confidence interval with p-value<0.05 were performed to adjust for confounding.

Result:-A total of 390 subjects have participated which yield 98.5% response rate. The finding of this study revealed 57.2% of patients are satisfied with their visit. Accordingly, long time spent in the facility, lack of drugs and supplies and convenience were associated with patient satisfaction.

Conclusion and Recommendation:-In this study low level of satisfaction was observed in studied health facility when compared to similar studies conducted in the country. Therefore, the concerned body Woreda and Zonal Health Offices and Zonal Administration and all the Health Center staffs should understand these weak service areas and plan for a better service delivery to improve customer satisfaction.

Key word:-Primary health care facilities, Medical Outpatient department service, Satisfaction, Mettu Rural Woreda

Abbreviations and Acronyms

AIDS	Acquired Immune Deficiency Syndrome
BPR	Business Process and Reengineering
DHS	Demographic Health Survey
HC	Health Center
HIV	Human Immune Virus
HP	Health Post
HSDP	Health Sector Development Program
MDG	Millennium Development Goal
MMR	Maternal Mortality Rate
MOH	Ministry of Health
OPD	Outpatient Department
PHC	Primary Health Care
PPHCF	Public Primary Health Care Facilities
PHCU	Primary Health Care Unit
WHO	World Health Organization

Contents

List of tables

Chapter one: Introduction

1.1 Back ground

Satisfaction is one of the meaningful indicators of patient experience of health care services. Asking patients what they think about the care and treatment they have received is an important step towards improving the quality of care, and to ensuring that local health services are meeting patients' needs (1).

Satisfaction surveys aim to identify the ways and terms in which patients perceive health services (2). These studies allow community voices to be heard and affirm the importance of their experience for health care planning (3).Some causes of the increasing importance given to patient satisfaction include attaching importance to the views of citizens because of consumerism and democratic values, and being influenced by the advice of friends or relatives about preferred health facilities (3). It is understood that it is impossible to talk about qualified utility without patient satisfaction.

Primary Health Care Facilities are the first point of contact with in health system and involves the provision of integrated, accessible health care services by variety of providers in health sector; however Utilization of PPHCF has become apparently low in developing countries including Ethiopia. Patients' health largely depends on the primary health care sector of the country. Different factors such as cultural norms, low health seeking behavior in part of the community and poor service provision in health service organization results for under utilizations of their services and leads clients to go up the chain to a high level ,often to more costly public hospitals, or to the private sector. The currently employed three tier health care delivery system in HSDP tries to improve the health of the community by expanding PHCU. According to HSDP IV report the numbers of HPs and HCs have reached 14,416 and 2,689 respectively and human resource development also show a good progress. But health service utilization which is measured with OPD per capita was still low in the country (4, 5).

Potential access of health facilities, however, will not necessarily lead to appropriate utilization if people are not willing to use the health facilities offered. This shows that without appropriate patient (consumer's) satisfaction the effectiveness of the primary health service is severely limited. Therefore, level of relationship between the primary health system and the population is very valuable, if client should continually consume the provision of care and their involvement in health care improvement is desired (6, 7, 8, 9).

1.2 Statement of the Problem

Quality involves the consistent delivery of a product or service according to expected standards (10). With the effectiveness of medical care increasingly measured according to economic as well as clinical criteria, the inclusion of patients' opinions in assessments of services has gained greater prominence over the past 25 years (11).

In recent years, using patient satisfaction levels as one of major indicators of quality of care were increasing in health systems organization across the world. (12,13).This is because now day's patients have become more aware of quality issue and want health care to become safer and satisfy their needs. Due to this many countries measure patient satisfaction on regular basis and made the results available to the public (14). If health care facilities fail to provide satisfactory and quality of health services, they are considered unsuccessful and by passed by patients. Therefore all health care facilities including primary health care facilities performance can be best assessed by measuring the level of patient satisfaction. Because satisfied patients believe that the organization has potential in understanding patient needs and demands related to health care (15).

It is an established fact that satisfaction influences whether a person seeks medical advice, complies with treatment and maintains a continuing relationship with practitioners. Donabadian, arguably the leading theorist in the area of quality assurance, has emphasized that Client satisfaction is of fundamental importance as a measure of the quality of care because it gives information on the provider's success at meeting those client values and expectations, which are matters on which the client is the ultimate authority (16,17).

Primary health care facilities are a place of entry (the gate keeper) in to health services and locus of continuing care for most of the health problems that occur in the population. In improving the service delivery in primary health care clinics, there is a need to place high priority on the consumers and their level of satisfaction with the provided services. Developed countries use patient satisfaction with care as an important outcome measure in primary health care (PHC) (18).

In Africa there is a general agreement that Public health services perform poorly. Authors noted that in sufficient staffing and lack of supplies may impede the efficient delivery of health care to patients. Therefore, in low and middle income countries alike, even if services are available, they are often of low quality. So many poor people by pass the closest public facilities to go to more costly private facilities or choose better quality at more distant public facilities. This indicates that

healthcare systems in most developing countries suffer from serious deficiencies in financing, efficiency, equity and quality and are poorly prepared to meet these challenges (7, 11, 14,19,20).

In recent years, donors have been advising developing countries to ensure that limited resources not only have an optimal impact on the population's health at affordable cost but also that health services are client oriented. For instance, the World Health Report emphasizes responsiveness of health systems as a crucial component of their overall performance defining responsiveness as the way the system responds to non health aspects, and whether it was meeting or not meeting patient expectations (21,22).

For countries with low utilization of the available primary health services, concern about assessing and assuring quality of primary health service from client perspective might be of great interest to health managers. This is because; client satisfaction and perceived quality will influence utilization of services, and thus continuity of care (19,22,23).

Therefore patients the only reason for a hospital and PHFs existence need services which are reasonably accessible and readily available at all times.

In Ethiopia, health services are limited and of poor quality and the country has extremely poor health status relative to other low-income countries. To solve this problem, the government has focused on facility expansion, on improving the organization and quality of health services delivered to the population. This is because improving the poor quality of care delivered to patients is one of the strategies to reduce the burden of communicable diseases and plays a significant role in attaining the Millennium Development Goals (MDGs). This intention of the government was reflected in the 1993 health policy and the health sector development plans of the country. In such efforts towards improving quality of health care, patient satisfaction is integral component of health services provided to the population (24).

Despite this progress health service deliver mode is still characterized by poor quality and low utilization from demand side. According to HSDP IV, report the OPD attendance per capita utilization is low and less than the WHO standards. The OPD attendance per capita is 0.3 visits per person per year in 2011 that show the previous pattern of low health service utilization, below the target set for the year (0.6 visits per person per year). The ratio of health personnel's to population ratio also substantially lower relative to low-income countries and majority of them are working in urban area (25,26).

Many studies regarding patient satisfaction were conducted in urban health centers and Hospitals in Ethiopia. Different studies conducted in Out Patient Departments of different hospitals in

Ethiopia shows client satisfaction level ranging 43.1% in Mekele, 54.1% in Harari and 77% in Jima (27,28,29).

As indicated by World Bank report also only 53% of households who visited government health facilities were satisfied with their visit. While some studies conducted on patient satisfaction most of them are focused in urban areas in the country but there are high disparities between accessibilities, quality of health service delivery between the urban and rural area (7).

Although the above efforts are under going in the rural area to improve the health service delivery, the needs of the people have not yet been adequately met and most of the community prefer the private clinics which are expensive and by pass to more distant public hospitals (7,5), this case is also true for Ilubabor zone were most of the populations live in rural area. Additionally level of patient satisfaction in the growing health centers is not known and there was no any attempt so far in the area. The OPD per capita in health facility was also 0.25/c/year in 2012/13 in the study area (30,31). Also there is no any information regarding the issue of patient satisfaction in Hospitals and health centers in the area according to the report of zonal health department. Therefore this study would have an important input in assessing the level of patient satisfaction with outpatient medical services, measure the physical accessibility and identify the factors affecting the patient satisfaction in growing health centers and services need improvement in those facilities, provide a recommendation to improve health service delivery which was helpful to enhance quality of health services in the area.

Chapter two: Literature Review

Health services have always been an essential human requirement because all the human beings need them for curative, preventive and rehabilitative purposes. It is a good quality health service than confer healing and only attainment of quality service or health can physically and psychologically satisfy the patient (32). Patient satisfaction is not a clearly defined concept. Most often satisfaction is defined differently by different individuals as a consequence of varying backgrounds and experiences. Although attempts were made to explain how patients become satisfied, there is not yet any one universal model explaining patient satisfaction.

It has often been argued that patient expectations about health care are the main antecedents to patient satisfaction. Patients are said to enter the health system with a variety of characteristics, attitudes and prior experiences with the services. These, together with the knowledge and information they gained from their previous utilization of the services, will help them define their needs for health care (33).

Patient satisfaction is an expression of the gap between the expected and perceived characteristics of a service. Satisfaction is a subjective phenomenon and could be elicited by asking simply how satisfied or not patients may be about the service. However, it has been found that, questionnaires' that ask patients to rate their care in terms of how satisfied they are tend to elicit very positive ratings that are not sensitive to specific processes that affect overall quality. It is recommended that patients be asked to participate on their experiences through specific questions (34).

Satisfaction studies historically begin to appear in health care literature in late 1950's.At that time there was growing awareness of the patient as evaluator of health care. Throughout the 1960's and 19070's a number of important studies had been done that assessed the quality of health care as revealed by the client satisfaction (34).

In recent years, measuring patient satisfaction levels have been defined as one of the major indicators of quality of care in health facilities. It used to compare health care programs, to evaluate quality of care and to identify which aspects of service need improvement. In addition this measure can help to educate medical staff about their achievements as well as their failure, assisting them to be more responsive to their patients' needs (35).

A patient satisfaction survey result varies from country to country across nation and influenced by numerous factors, only continuous evaluation can identify the factors which can affect the satisfaction .As stated by different scholars in the past decades, satisfaction level has never been fixed nor had a consistent score. It changes with circumstances and quality and quantity of service

provided. It has been reported by several studies that satisfaction rate was as high as 91-100% and as low as 51-60 % (6,7,16,17).

As patient satisfaction has become an integral part of quality of care and methods for assessing health system, according to Margaret Brawley, the most important dimension of quality for the clients are technical competence, interpersonal relations, accessibility and amenities (1).

According to the US National Committee for Quality assurance report the state of managed care quality found that, the health plans with the highest satisfaction scores for the service aspects of health care have the highest satisfaction scores by addressing those services that consumers most readily appreciate, such as provider relationships, access, availability of information and opportunity for participation can influence health care quality outcomes (36,37).

Healthcare quality theory of Donabedian proposed that satisfaction was the principal outcome of the interpersonal process of care. He argued that the expression of satisfaction or dissatisfaction is the patient‘s judgment on the quality of care in all its aspects, but particularly in relation to the interpersonal component of care and service characteristics (16).

It had been proposed that utilization of medical services is not only personal matter but the decision is taken within a family or with the essence of friends. The use of medical services by people is the end result of the social group they live in. Aday and Anderson have suggested that perceptions of satisfaction are the result of individual patient characteristics and of the medical care systems they enter. Often service recipient characteristics have been studied such as sex, age, marital status, educational status (37). Studies showed that older peoples are more social and accepted than younger or they had more respect and care from the provider. It was also assessed that they had lower expectations. Studies showed that the effect of sex on satisfaction are contradictory, with some studies showing that women tend to be less satisfied and other studies showing opposite. Regarding the effect of educational status, many studies concluded that higher level of education was less satisfied with health care. For instance ,better educated patients may participate in diagnosis and treatment decisions more than less educated patients but remain less satisfied with their degree of participation because health care provider are not meeting their higher expectation (38,39,40,41).

In developing countries utilization of public primary health facilities are apparently low. Different factors such as socio-demographic factors, lack of drugs, poor attitudes of staffs and poor hygiene in facility results for under utilization of their services. Potential accesses of health facilities however will not necessary lead to appropriate utilization. If people are not willing to use the

health facilities offered. This shows that without satisfying the needs of patients the effectiveness of the primary health services are severely limited (6,7).For example study conducted in Indonesia kuta blang health center showed 23% level of satisfaction with outpatient medical services. The main reason results for low satisfaction addressed in the study is low quality of care, low courtesy of health care provider, lack of drugs and poor physical environment (41). Satisfaction with the physical environment in which care is delivered has usually been studied in inpatient settings. This dimension can also be measured with regard to outpatient care if particular facilities and services are specified. Source of satisfaction with the environment of care includes general pleasantness at atmosphere, comfort of seating, attractiveness of waiting rooms, clarity of signs and directions, good lighting, quite, and clean and neat and orderly facilities and equipment (36,42).

A study conducted at patient's satisfaction with health services at Kuta Blang Health Center in Indonesia revealed that 73% of patients are not satisfied with regarding to the cleanliness of the environment (41).A cross sectional survey conducted in Ghana showed that waiting time, courtesy of provider (unfriendly and uncaring), high costs of services are factors associated to patient satisfaction at rural PHC facilities (43). Another study conducted in Mozambique on satisfaction with outpatient health care services also showed that 55% satisfaction rate and failure to receive prescribed medication was found to be the most common compliant associated with lower satisfaction rates (42). Similarly a qualitative study of the Iringa district of Tanzania, a poor rural area, showed that patients bypassed low quality facilities in favor of those offering high quality consultation and prescriptions, staffed by more knowledgeable physicians and better stocked with basic supplies (42).

In Ethiopia, health services are limited and of poor quality and the country has extremely poor health status relative to other low-income countries. Despite this progress health service deliver mode is still characterized by poor quality and low utilization from demand side. The reason for low utilization in public facilities included in the report were physical accessibility, economic (cost to patient), cultural problems (health seeking behavior) and poor quality of care (25,26).

A study conducted in Jimma Hospital showed that 77% of level of satisfaction with Out Patient services. Lack of drugs, poor information provision, long waiting time and poor cleanliness of facilities were found to be the major causes for satisfaction (29).

Study conducted in urban areas of selected health facilities in Ethiopia shows a high percentage of satisfaction with OPD services. The possible reason for high satisfaction is due to availability of users' friendly facilities in urban areas. Cross sectional survey conducted in oromia region, west showa central Ethiopia showed that the satisfaction level was 62.2%. The study revealed that interpersonal characteristics, waiting time and physical environment were associated to patient satisfaction (44,45).Therefore factors related to client satisfaction like waiting time, courtesy of health professionals, availability of drugs and supplies and appearance of physical environment are some of the factors that affect client satisfaction when they are coming to receive medical treatment. Having adequate information about these factors in rural primary health centers is relevant in order to provide recommendation, to improve the health service delivery and results in a better client satisfaction.

Conceptual framework for the study

The conceptual framework for this study was adapted from Anderson behavioral model of access. According to this model access is actual use of personal health services and everything that facilitates or impedes their use. It link between health service systems and the population they serve. And also it is defined as not only visiting a medical care provider but also getting to the right services at the right time to promote improved health out come. As explained in the model improved access to care is best accomplished by focusing on contextual as well as individual determinants. This context includes health care organization and provider related factors as well as community characteristics. The model emphasizes contextual factors in recognition of the importance of care, the structure and process of care and the realities of managed care environment. As suggested by the model the final outcome or satisfaction was affected by the above contextual characteristics (37).

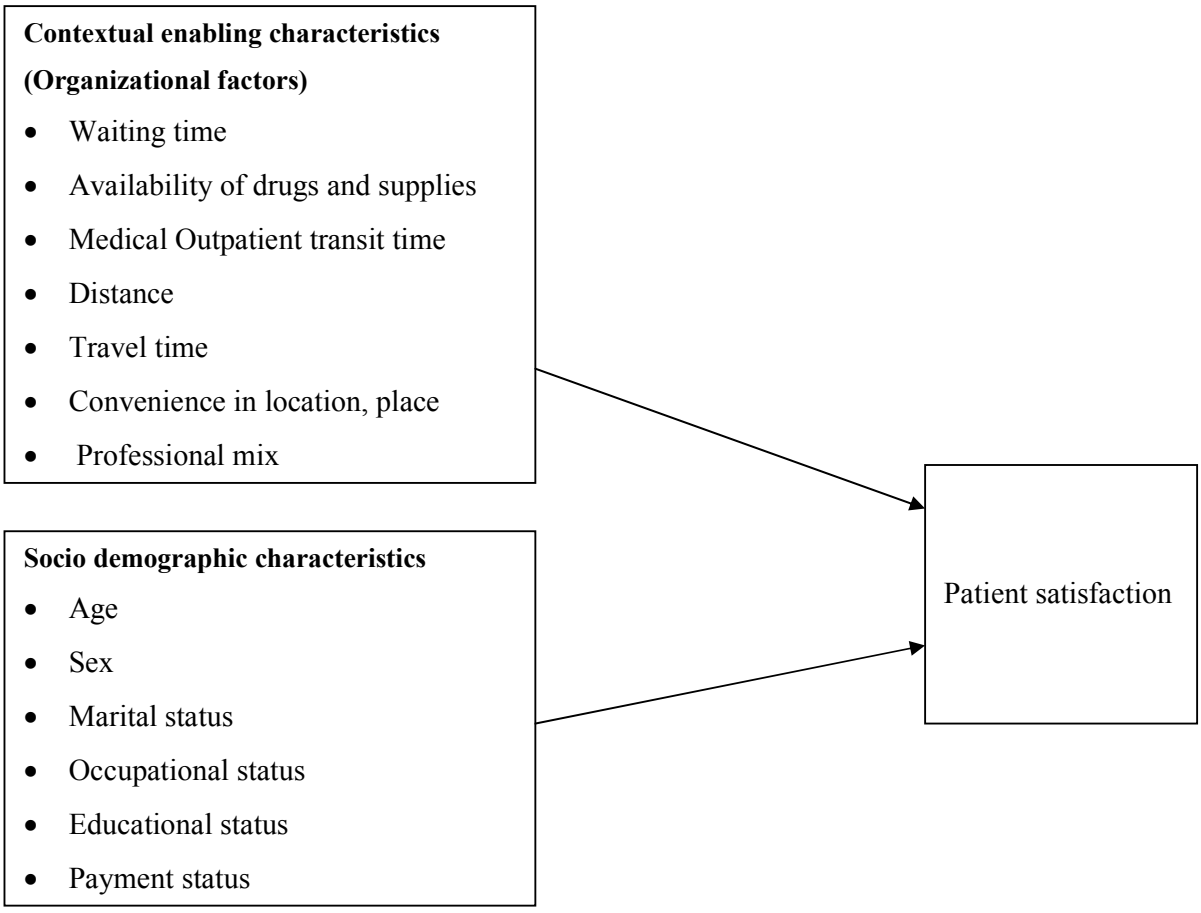

Fig 1. Conceptual frame adapted from A.Anderson Behavioral Model

2.1 Significance of the study

The findings of this study help the health management at all level and in particular those looking after the health institutions in the zone to understand the extent of the problem in the health center and other similar health institutions. The study also enhances the capacity to look for possible alternative solutions to health service delivery in collaboration with the health center. It will also contribute to increase in the knowledge and awareness of the problem areas by concerned bodies including the health center staffs and it will enhance/improve health service deliveries for the community. In addition, the paper may be useful to other researchers as reference material while conducting further studies on similar problems.

Chapter Three: Objectives

3.1 General objective

- To assess patients satisfaction and identify factors affecting it among patients with outpatient medical services at public health centers of Mettu rural woreda Ilubabor Zone Oromia Region South West Ethiopia.

3.2 Specific objective

1. To determine the level of satisfaction with the service provided by the outpatient medical service department.
2. To determine the level of satisfaction related to provider related characteristics.
3. To determine the level of satisfaction with service related characteristics.
4. To determine the level of satisfaction with facility related characteristics.
5. To identify factors affecting patient satisfaction related to patient characteristics.
6. To identify factors affecting patient satisfaction related to organizational characteristics.

Chapter four: Methods and materials

4.1 Study area and period

The study was conducted in Mettu Rural Woreda, Illu Ababor Zone, Oromya Region; South-West Ethiopia. The woreda consists of 29 rural kebeles which are bounding Mettu town. The woreda has a total population of 72,828 with 14863 households in 2005 E.C from which 36408(49.9%) are male (17). The woreda has its own administration council as higher management body,29 kebele administrations,414 health development armies(garees).There were four primary health centers(growing health center),twenty one functional health post and eight health post which are on construction and eight lower private clinics and one rural drug vendor in the woreda. There are a total of 139 human resources available in the woreda including woreda health office, from which 87(70%) of them are male. In four health centers there are a total of 124 staffs from which, 28 are supportive staffs, 55 health extension workers and 41 health professionals. From a total of 41 health professionals there are three health officers, two BSc clinical nurses,25 junior clinical nurses, six midwifery nurses , three pharmacy technicians and two laboratory technicians. This study was conducted from September 25 to October 18, 2013.

4.2 Study design

Facility based cross-sectional study was conducted using quantitative and qualitative method of data collection.

4.3 Population

4.3.1 Source population:

All clients who visited outpatient medical service were source population.

4.3.2 Study population

Sampled patients who visited outpatient medical services were study subjects.

Participants involved in FGD.

4.3.3 Inclusion and exclusion criterion

Inclusion criteria-patients aged greater than 15 years.

Exclusion criteria- Patient's who seriously sick.

4.4 Sample size determination and sampling techniques

4.4.1. Sample size determination

The sample size was determined by single population proportion formula based on the estimates of proportion of satisfaction level 62.6% done in central Ethiopian health center 2010 (45). Based on this assumption by fixing the level of confidence at 95% and the margin of error at 5%, the sample size was determined by the formula: $n= (Z\alpha/2)^2 \times P (1-P) /d^2$

Where

- P=assumed proportion of satisfied patients =62.6%
- D=Error to be tolerated=5%
- Z at 95% CI=1.96 n =360 by adding 10% non response rate final sample size will be 360+36=396

4.4.2 Sampling techniques

All health centers were covered in the study. And then the sample of (n=396) was allocated proportionally based on number of patients served last year on the same month in each growing health center. Selection of study subjects was performed consecutively at the exit of the outpatient department of the health center after receiving the medical services in the OPD. Non-probability purposive/ Judgmental sampling method was employed to select for FGD participants.

Sampling techniques and sampling unit distribution

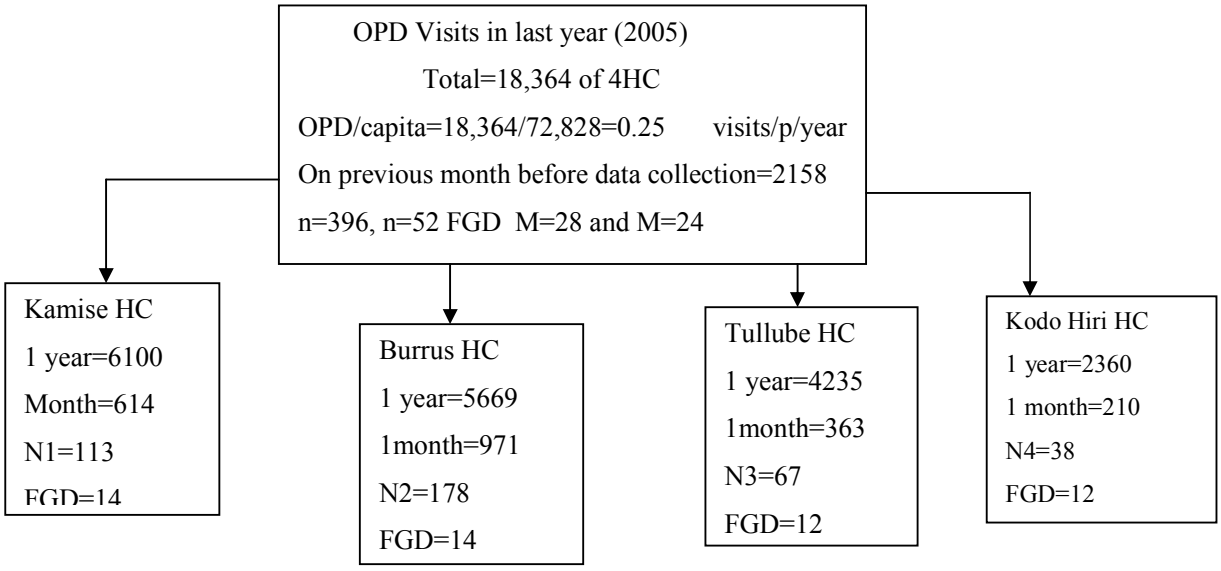

Fig 2. Schematic representation of sampling design

4.5 Data collection tools and techniques:

Structured questionnaire was developed for the purpose of data collection after reviewing relevant literatures and assessing the internet sources (47,48).. The questionnaire was designed to obtain information on socio demographic characteristics of respondents and their satisfaction level with the different components of the outpatient services which included the availability of drugs and supplies, information provision by the health workers, waiting time to get the services, and courtesy and respect of the health workers. There were 15 question on five point likert scale ranged from strongly disagree=1 to Strongly agree=5 developed to ask satisfaction of patients towards different components of outpatient medical services .From a total of 15 question six question asking about provider related characteristics, three question about service characteristics, four question about facility condition, one question about perceived recommendation of the facility and one question about overall satisfaction during the visit of the day and this question were used to measure patient satisfaction. Eight data collectors who completed grade 10/12 were recruited for data collection and two public health nurse professionals were recruited as a supervisor. One female nurse professional and one female data collectors and the principal investigator and one public professionals were conducted the FGD.

4.6 Data quality management.

The questionnaire in the beginning was prepared in English and then translated into Afan Oromo and back to English to ensure consistency, but finally administered in Afan Oromo, the local language .The questionnaire was pretested in one health center prior a month to data collections to ensure the consistency, clarity and understanding of its content. Data collectors and supervisors were trained for 2 day. Regular supervision, spot checking and reviewing the completed questionnaire was carried out by two public health nurse professionals and the principal investigator daily to maintain data quality and guideline was developed to perform FGD.

4.7 Data analysis

Data was entered and analyzed using SPSS software version 16 for data analysis. Bivariate and multiple logistic regressions were performed to determine the association between dependent and independent variables. Multivariate logistic regression was used to identify the independent predictors of patient satisfaction. In the bivariate analysis variables that are significant with p-value<0.25 were selected as a candidates for multi variable logistic regression at 95% confidence Interval and finally those variables that are significant at p-value <0.05 in multiple logistic regression were identified and reported in the analysis.

In the analysis each 15 item of likert scale responses were categorized in to satisfied and not satisfied by combining strongly agree and agree in to satisfied and strongly disagree and disagree in to not satisfied then, neutral responses were also classified as dissatisfied by considering that they may represent a fearful way of expressing dissatisfaction and the number of neutral responses was small. According to likert scale Wikipedia and different literatures in the independent analysis of likert items ranging from one to five it was possible to use item median scale or three to categorize the group in to two. Similarly in the analysis to determine the satisfaction of patients towards different components provider, service, facility and overall satisfaction the weighted mean composite score was calculated for each component and overall satisfaction and then median score of 3 was used as a cut of point to dichotomize patients to satisfied and not satisfied. The qualitative data based on four thematic areas was analyzed manually by summarizing the ideas forwarded by patients.

4.8 Variables of measurement

4.8.1 Dependent variables-Patient satisfaction towards outpatient medical services

4.8.2 Independent variables

Patient characteristics -Sex, age, marital status, educational status, occupational status and payment status.

Organizational factor (amenities variable)-patient waiting time, OPMS consultation transit time, availability of drugs and supplies, availability of equipment at the OPD, convenience of health center, travel time and distance, availability of mix of professionals.

4.9 Ethical consideration

Prior to data collection a written ethical clearance was obtained from Jimma University, College of public health and medical science graduate programs research ethical review committee office. And a written formal paper was sought from Illuababora zone health office, Mettu Rural administration and from respective health office at each level and informed verbal consent was obtained from study participants.

4.10. Dissemination plan

The result will be disseminated to Jimma University, Illu abba boora zonal Health office, Mettu woreda health office, different stake holders and published to scientific journals.

4.11 Operational definition

Level of Patient satisfaction:-percentage of satisfaction determined by using median score 3 as a cut-off point and those score above the median are considered as satisfied for overall satisfaction.

Provider related characteristics:-Perceived level of agreement or satisfaction towards the variables representing dimension of provider related characteristics such as courtesy or respect of health care, the way listening to the patient, perceived information provision, and perceived clearly making a plan of action with clients by provider judged by a patient.

Service related characteristics:-perceived level of agreement or satisfaction towards the variables representing dimension of service characteristics such as availability of drugs, the queue process and availability of enough chairs and seat in waiting places rated by patients.

Actual consultation time: The amount of time the patients spend with health care provider in the examination room. The consultation duration was recorded by the data collectors who measured the minutes elapsed between entry and exit from the examination room.

Travel time;-Time spent to reach health center which is categorized as <=2 hour and greater than 2 hour.

OPD waiting time judged by patient: An opinion of patient towards waiting time from arrival to initiation of triage or card room.

OPD waiting time recorded: "Average time from arrival at the OPD to initiation of triage recorded in minutes, which is given by summation from arrival at OPD to initiation of triage divided by number of attendances (47)."

OPD consultation transit time: "The time recorded from beginning of OPD consultation to discharge from the facility (following completion of investigations and purchase of necessary drugs), which is given by summation of time from beginning of OPD consultation to discharge from facility divided by number of attendances (47)."

Physical environment- is perceived level of agreement or satisfaction towards facility condition such as cleanliness, privacy of building, place, rooms and toilets rated by patients.

Chapter Five: Result

5.1 Socio demographic characteristics of respondents

In this survey, a total of three hundred ninety patients have participated which yield 98.5% of response rate. Out of total respondents, two hundred three (52.1%) of participants were female. The mean age of participants was 34.08±10.346 SD. Higher proportion of participants or 122(31.8%) are between age category of 35-44.Regarding, their educational status one hundred twenty three of them are un able to read and write, the rest was able to read and write and could at least cover primary education. The majority 269 (69%) of the total samples were married and the others are single, divorced or widowed. Concerning their payment status, 342(87%) of respondents have paid (depended on their own personal finance) to get services from the facility, while the rest have received the services free of payment. The highest proportion 278(71.3%) of them were farmers.

Table 1- Socio-demographic characteristics of respondents of Mettu Rural Woreda,2013 (n=390)

Background characteristics	Number	Percentage
Sex		
Male	187	47.9
Female	203	52.1
Age in years		
15-24	82	21
25-34	122	31.3
35-44	124	31.8
45+	62	15.9
Marital status		
Single	96	24.6
Married	269	69
Divorced	12	3.1
Widowed	13	3.3
Educational Status		
Unable to read and write	123	31.5
Able to read and write	116	29.7
Grade 1-8	100	25.6
Grade 9-12	29	7.4
Above 12	22	5.6
Occupational status		
Government employee	24	6.2
Merchant	21	5.4
Farmer	278	71.3
Student	45	11.5
Other*	22	5.6
Payment status		
Paying	342	87.7
Free	48	12.3

Other: house wife, no job, daily laborers

5.2 Institutional aspects and patterns of visit

Two hundred seventy seven (71%) of patients have traveled more than 10km to reach the health facilities. The mean distance between resident of patients and health facility was 15.76±9.58 SD with range of 0.5 to 40Km.The mean travel time of patients to reach health facility was 117.2±63.011 with the range of 15 to 300 minutes (5hr).However, the higher proportion of participants or three hundred one (77.1%) of them judged that the health facility was convenient and it was ease to reach for them.

Table 2-Responses of study subjects on different service characteristics, in Mettu Rural Woreda ,2013 (n=390)

Characteristics	Number	percentage
Distance from home to facility		
<=10km	113	29
>10km	277	71
Travel time in hour		
<=2hr	218	55.9
>2hr	172	44.1
Convenience of ease to reach the facility		
Convenient	301	77.2
Not convenient	89	22.8
Frequency of visit in last 12 months		
Once	294	75.5
Twice	76	19.5
Three times	20	5.1
Time spent in facility to get services		
<1hr	310	79.5
2-4hr	80	20.5
Laboratory service administered		
Yes	91	23.1
No	299	76.7
Waiting time for lab in minutes		
1-14	27	29.7
15-29	54	59.3
30-44	10	10.0
Waiting time for card in minutes		
1-9	192	49.2
10-19	143	36.7
>20	55	14.1
Time spent in examination in minute		
1-9	43	11
10-19	296	75.9
20-29	38	9.7
>=30	13	3.3
Accessing prescribed drugs		
Yes have got all	169	43.3
Partially have got	175	44.9
Not at all	46	11.8

Regarding to visiting of health facility in the past 12 months, the higher proportion or 294(75.5%) of patients have responded that they have visited the facilities once only. Three hundred ten (79.5%) of participants stayed less than one hour to get services in the facility and 192(49.2%) of respondents have wait less than 10 minutes to see health worker. Two hundred sixty nine (75.9%) of patients responded that they spent 10-19 minutes for consultation in examination room. Concerning the accessing of prescribed drugs only 169(43.3%) of them have got a prescribed drugs and 175(44.9%) of them have partially got prescribed drugs in the facility.

5.3 Perceived level of rating of provider, service and facility related characteristics by patients

Two hundred thirty one (58.5%) of patients were satisfied with courtesy and respect of registration staff and other staff. Two hundred forty six (63.2%) of patients were satisfied with courtesy and respect of health care provider. From service characteristics 250(64.1%) of patients are satisfied with the queue process in waiting area. About 54% of patients were satisfied with the availability of drugs in the facility. 287(73%) of patients was satisfied with cleanliness of the rooms.

Table 3-Patients satisfaction related to different components of outpatient medical services in Mettu Rural Woreda, South West Ethiopia, 2013 (n=390)

Characteristics	SA No (%)	Ag. No (%)	Neu. No(%)	Di. No (%)	S.dis No (%)
Registration and other staff are friendly and respectful	34(8.7)	197(50.5)	31(7.9)	96(24.6)	32(8.2)
Health providers are courteous, respectful showing me care and compassion	94(24.1)	152(39)	23(5.9)	74(19)	47(12.1)
Health provider really listened to me	68(17.4)	176(45.1)	12(3.1)	110(28.2)	24(6.2)
Staffs are volunteer in providing enough inf.	58(14.9)	169(43.3)	16(4.1)	85(21.8)	62(15.9)
Health provider maintain my privacy	56(14.4)	200(51.3)	12(3.1)	89(22.8)	33(8.5)
Health worker provided me enough Information told the way of future prevention	75(19.2)	189(48.5)	15(3.8)	87(22.3)	24(6.2)
Service process was fast and no overcrowding	7(1.8)	243(62.3)	16(4.1)	116(29.7)	8(2.1)
waiting area was Clean	28(7.2)	225(57.3)	13(3.3)	106(27.2)	18(4.6)
Am satisfied with availability of enough equipment in the waiting area	24(4.4)	236(60)	18(4.6)	92(23.6)	20(5.1)
Am Satisfied with availability of drugs and supp.	17(4.9)	192(49.2)	23(5.4)	133(34.1)	25(6.4)
Facility rooms clean	13(3.3)	274(70.3)	10(2.6)	76(19.5)	17(4.4)
Rooms are enough in keeping privacy	43(11)	237(60.8)	9(2.3)	90(23)	11(2.8)
Latrines and facility area are clean	6(1.5)	250(64.1)	11(2.8)	89(22)	34(8.7)
I would recommend this facility	10(2.6)	224(57.4)	18(4.6)	112(28.7)	26(6.7)
Am satisfied with overall quality of care and service received today	12(3.1)	211(54.1)	25(6.4)	111(28.5)	31(7.9)

SA-Strongly Agree, Ag-Agree, Neu-Neutral , S.Diss-Strongly Disagree

To dichotomize the responses on five scale likert items first weighted mean score was calculated for each component based on their number of items. Accordingly the overall weighted mean score for provider related characteristics was 3.37,for service characteristics was 3.2 and the highest satisfaction mean score 3.42 was for facility characteristics. The respondents overall satisfaction mean score was 3.16 as shown from table below.

Table 4 Respondents weighted satisfaction mean score related to provider, service, facility related characteristics and overall satisfaction.

Variables	Number	Mean score	SD	Max.	Min.
Provider characteristics	390	3.37	0.8722	4.83	1.5
Service characteristics	390	3.2	0.748	4.33	1.33
Facility condition	390	3.42	0.679	4.5	1.5
Overall satisfaction	390	3.16	1.116	5	1

To determine the percentage of patient satisfaction related to provider, service, facility related characteristics and overall satisfaction item median scale of three was used as a cutoff point. Over all 223(57.2%) of patients are satisfied with their visit of medical outpatient services in public health centers.

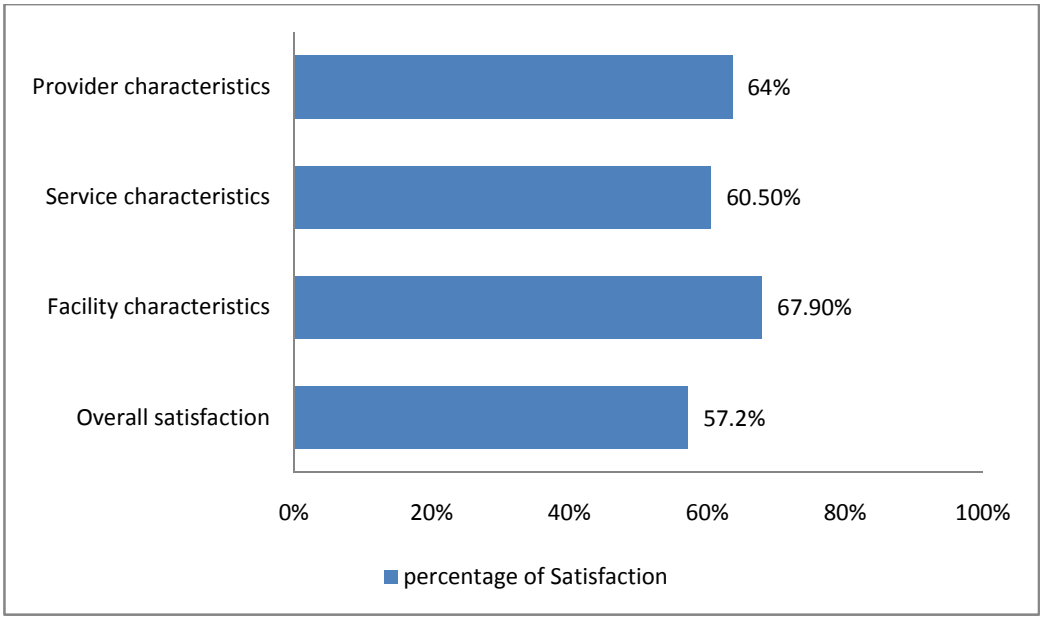

Figure 3: Percentage of satisfaction for different kinds of services at medical outpatient department and overall satisfaction

Table-5 below shows a recorded patient waiting time in minute for getting services, actual consultation time and over all time spent(outpatient medical service consultation transit time in the facility).The mean waiting time recorded to see health worker or a time recorded after the arrival of patient to initiation of triage or registration room was 10.264(±4.5155).Actual consultation time or time spent in examination to discuss health matter recorded yield a mean of 14.046(±3.78).The mean of outpatient medical service consultation transit time or a time recorded after initiation of triage to final exit of patients from health facility was 57.425±16.725 minute or nearly one hour.

Table 5-Patients' waiting time, Actual consultation time and Outpatient consultation transit time in minute for getting medical services in Mettu Rural Woreda, January, 2013 (n=390)

Variable	N	Min.	Max.	Mean	SD	95% CI	
						lower	upper
Waiting time recorded to see health worker in minutes	390	5	30	10.264	4.50130	9.816	10.7122
Actual consultation time in minutes	390	7	25	14.046	3.78101	13.0462	14.4226
Outpatient consultation transit time recorded in minutes	390	40	150	57.425	16.7253	55.7605	59.0908

5.4 Association between patient satisfaction and different background variables

As shown in the table 5 below age of patient, occupational status, educational status and payment status were shown to be significantly associated with patient satisfaction. Respondents, those who are found within age category of 15-24 and 25-34 were 0.398(0.236,0.672) and 0.386(0.216,0.689) as likely as to be satisfied when compared to those who are found within age category of 35-44.Patients who are un able to read and write are more satisfied when compared to those educationally literate and students were 0.345(0.179,0.606) as likely as to be satisfied than farmers. Patients received services free of charge were 1.966(1.0118,3.796) more likely to be satisfied than paid patients. Sex and marital status of clients were not associated with patient satisfaction.

Table 6- Association between patient satisfaction and socio demographic variables of respondents in Mettu Rural Woreda,2013(n=390).

Characteristics	Number	Not Sat	Sat.	COR	95%CI of COR		pvalue
					LB	UB	
Sex							
Male	187(47.9)	89	98	0.687	0.459	1.028	0.068
Female	203(52.1)	78	125	1			
Age in years							
15-24	82(21)	43	39	0.398	0.236	0.672	0.001*
25-34	122(31.3)	63	59	0.386	0.216	0.689	0.001*
35-44	124(31.8)	37	87	1			
45+	62(15.9)	24	38	0.673	0.355	1.277	0.226
Marital status							
Single	96(24.6)	46	50	0.752	0.471	1.201	0.233
Married	269(69)	110	159	1			
Divorced	12(3.1)	5	7	0.692	0.217	2.201	0.533
Widowed	13(3.3)	5	8	1.107	0.353	3.473	0.862
Educational Status							
Unable to read and write	123(31.5)	50	73	1			
Able to read and write	116(29.7)	41	75	1.253	0.742	2.115	0.399
Grade 1-8	100(25.6)	47	53	0.772	0.453	1.316	0.342
Grade 9-12	29(7.4)	15	14	0.639	0.284	1.440	0.280
Above 12	22(5.6)	14	8	0.391	0.153	1.002	0.051*
Occupational status							
Gov. employee	24(6.2)	13	11	0.529	0.229	1.225	0.137
Merchant	21(5.4)	12	9	0.688	0.283	1.676	0.411
Farmer	278(71.3)	107	171	1			
Student	45(11.5)	29	16	0.345	0.179	0.606	0.001*
Other	22(5.6)	8	14	1.095	0.444	2.698	0.844
Payment status							
Paying	342(87.7)	153	189	1			
Free	48(12.3)	14	34	1.966	1.018	3.796	0.044*

*statically significant at p-value<0.05, Big numbers =reference category

Long waiting time spent in the facility, convenience of the facility, travel time to reach health facility and accessing prescribed drugs were significantly associated with patient satisfaction. Patients who traveled more than two hours to reach health facility were 0.389(0.235,0.644) as likely as to be satisfied than those who travelled less than 2 hours. Patients who have not got prescribed drugs were 0.250(0.156,0.401) as likely as to be satisfied than those who accessed prescribed drugs.

Table 7 Bivariate association of patient satisfaction with different service characteristics of Mettu Rural Woreda, 2013 (n=390)

Characteristics	No	Not sat	Sat	COR at 95% CI	p-value
Time spent in facility to get services					
<2hr	310	118	192	1	
>2hr	80	49	31	0.389(.235,0.644)	000*
Waiting time to see health worker					
1-9	192	67	125	1	
10-19	143	70	73	0.559(0.359,0.870)	0.01*
>20	55	30	25	0.447(0.243,0.820)	0.009*
Frequency of visit in last 12 months					
Once	294	132	162	1	
Twice	76	28	48	1.397(0.831,2.349)	0.207
Three times	20	7	13	1.513(0.587,3.902)	0.391
Accessing prescribed drugs					
Yes have got all	169	36	133	1	
Some have got	175	91	84	0.250(0.156,0.401)	000*
Not at all	46	40	6	0.041(0.016,0.103)	000*
Convenience of ease to reach the facility					
Convenient	301	109	192	1	
Not convenient	89	58	31	0.363(0.185,0.498)	000*
Travel time in hour					
<=2hr	218	70	148	1	
>2hr	172	94	75	0.366(0.241,0.553)	000*
Distance from home to facility					
<=10km	113	37	76	1	
>10km	277	130	147	0.503(0.316,0.799)	000*

*statically significant at p-value<0.05, First category=reference category

In multiple logistic regression, convenience, time spent in the facility, accessing prescribed drugs, long travel time were appeared to be significant predictor of patient satisfaction. From socio demographic age of patients also appear to be associated with patient satisfaction. Patients who spent greater than two hour were 0.389 less likely to be satisfied than those who spent less than

two hours and those who were partially accessed prescribed drugs were 0.279 less likely to be satisfied than those who accessed all prescribed drugs as shown below.

Table 8– Factors affecting patient satisfaction in public health center of Metu Rural Woreda ,2013 (n=390)

Characteristics	Number	AOR at 95% CI	p-value
Age in years			
15-24	82(21)	0.839(0.301,2.345)	0.738
25-34	122(31.3)	0.294(0.153,0.562)	000*
35-44	124(31.8)	1	
45+	62(15.9)	0.85(0.384,1.880)	0.689
Occupational status			
Government employee	24(6.2)	0.368(0.129,1.051)	0.062
Merchant	21(5.4)	0.966(0.297,3.341)	0.995
Farmer	278(71.3)	1	
Student	45(11.5)	0.295(0.086,1.008)	0.05*
Other	22(5.6)	0.629(0.198,1.997)	0.431
Time spent in facility to get services			
<2hr	310	1	
2-4hr	80	0.352(0.154,0.802)	0.013*
Accessing prescribed drugs			
Yes have got all	169	1	
Some have got	175	0.279(0.161,0.484)	000*
Not at all	46	0.032(0.011,0.091)	000*
Convenience of ease to reach the facility			
Convenient			
Not convenient	301	1	
	89	0.402(0.189,0.856)	0.018*
Travel time in hour			
<=2hr	218	1	
>2hr	172	0.392(0.190,0.808)	0.011*

*statically significant with p-value<0.05,1=reference category

5.6 Suggestion given to improve the services

Patients were asked to give suggestions they believed are important for improving the services. Some of them gave more than one suggestion. Accordingly, the main ones patients forwarded were improving supply of drugs and equipment, improving patient handling practice, supervision of staff by responsible body, improving the supply of water and electric power etc table-8 below.

Table 9-Suggestions given for service improvement given by respondents, of Mettu rural woreda, 2013(n=390).

Suggestion given	Respondents (N=390)
Improve supply of drugs and equipment	281 (72%)
Improve patient handling practice	239(61.2%)
Improve number and mix of care providers	180(46.1%)
supervision of staff performance by responsible body	212(54.3%)
Reduce waiting time	81(20.7%)
Improve management system	103(26.4%)
Improving the supply of water and electricity	221(56%)

Chapter Six:- Discussion

This study has revealed that the satisfaction level with the outpatient medical services in primary health care facilities was 57. 2%.This finding is lower when compared to the reports of the study conducted in study conducted in rural Ghana, central Ethiopia and study conducted in selected health facilities in urban Town of Ethiopia which showed 90%, 62.6% and 93 % respectively (42,45,44). The reasons for this difference could be due to contextual differences and study design which is that of Ghana includes district hospital. On the other hand this finding is also higher when compared to study conducted in Amhara region (50) and kutablang health center in Indonesia (41) which is 23% and 22% respectively. The difference might be due to study design and the way of measuring studied factor because the current study was facility based and that of Gonder Amhara region was community based. In addition different cultures expressed their satisfaction in different ways which tend to exaggerate social desirability bias.

This study has shown that lack of drugs and supplies in the facilities were the major problem. As shown in the result of this study more than 3/4th (87.7%) of those patients have paid for services. However only 43.3% of patients have got prescribed drugs and almost more than half patients did

not got prescribed drugs. Similarly, other findings conducted in Jimma (29) and Tigrai Hospitals showed (27) that 70% and 61% of patients did not got prescribed drugs from hospital pharmacies. The reason explained in those studies were increase in number of outpatient services users without corresponding and adequate change in those facilities. But the inability to get prescribed drugs from health facilities was in line with report from above studies by increasing the level of dissatisfaction. Another studies conducted in different setting in different countries (27,29,41,42,43,45) also revealed that failure to get prescribed drugs was found to be the most complain associated with lower satisfaction. The finding of this study also reflect that lack of prescribed drugs was significantly associated with patient satisfaction, which showed that those who have not got prescribed drugs and partially got prescribed drug were 0.032(0.011, 0.091) and 0.279(0.161, 0.484) less likely to be satisfied when compared to those who have got all prescribed drugs in the facility.

Generally, as stated in different studies above and another studies lack of prescribed drugs were the main reason for dissatisfaction of patients and leads many poor people to bypass the closest public facilities to go to more costly private facilities or choose better quality at more distant public facilities (7,15,20).This is similarly indicated in present study both in FGD. Most of the discussants or twenty six of them said that they don't get laboratory services. The majority of them are from two health centers. They said that due to lack of light and laboratory equipments we have not got enough services in the facility. For example two male and one female discussant said, there is no installation of light in our health center and we don't get any lab procedure therefore we are forced to bypass our facility near us and move to the town to got all services. Other discussants from other health center said that "even though there is a lab professional here due to the lack of reagents we have not got all lab services." Finally regarding lab services, almost all discussants expressed that, we know that the government build this facility here to solve our problem but there should be enough supply of all services including water & hydro electric power for us." Regarding the drug availability, the participants explained that no enough drugs in the facility at all. For example two female participants said, even though we got all services, finally when we go to the health center pharmacy, they said that no drugs and go to buy it from outside which is expensive to us. Finally, all participants underline the problem of drug in the facility, so this may also be one of the reasons for dissatisfaction in the facilities.

Regarding provider related characteristics, the respondents of this study rated that courtesy and respect (64%), information provision by health worker (61.8%) and the way health worker keep privacy (62.6%) level of satisfaction. This rating is lower than that of Jimma which is 91% and

86.5% for courtesy and respect and information provision and similar study conducted in central parts of Ethiopia which revealed that information provision (being told the name of illness) rated (68.6%) and rated (72.25%) for courtesy and respect satisfaction level respectively. The reason for differences might be due to difference between facilities setting and professional mix because those facilities are higher referral hospitals and teaching hospitals and those health centers highest health professional (29,44). The way they keeping privacy was comparable with that of Jimma. This similarity might be due to the government efforts to full fill all needed equipments for the newly constructed facilities and also those health professional may tried to maintain the patient's privacy during consultation. The issue of provider related characteristics also explained in FGD, Almost all the discussants explained that there was a problem regarding the courtesy & respects by the staffs. Only few people expressed that almost some of health Provider have a good courtesy and respect but a problem is reflected from a majority of health providers.One male and other female discussants' reported summing up their ideas, some of health workers almost have good courtesy & respect to their clients, but others and registration staffs shout on clients and they don't listen to us and are rude & unethical. Most of the participants stated and agreed that they are not interested in the hospitalization of the staffs in the facility. Specially one male participants said that "we are very happy with the construction of health Center, but if there was no a good customer handling by the staffs in the facility we are forced to use the private clinics which are very expensive and also forced to move up to the higher level Mettu hospital. Therefore, if we have not got a good service here so what is the use of building health Facility here''. The other female participant said that "The first service health worker should provide was showing good empathy and good respect for the Patient. This is one of the ethics that differentiate health worker from others. Therefore, the government should supervise and train the customer handling system because patients are the customer and clients for the survival of the health facility". This therefore indicating there is a problem related to courtesy and respect and one should pay attention to improve the situation in general in the facility.

Concerning the other issue like service characteristics and amenities variable the present study showed that level of satisfaction rated 64.5%,64.1%,73.6%,71.3%,65.6% for cleanliness of waiting area, availability of enough equipment in the waiting area, cleanliness of the rooms, privacy of the rooms and cleanliness of latrine respectively. This rating was comparable with study conducted in Jimma hospital which showed 66.6% for cleanliness of latrine, but greater than that of Tigrai regional Hospitals which is 36.3%.It was also lower than that of studies conducted at level of patient satisfaction conducted in different parts of urban health centers of

Ethiopia which showed 76.5% and 90.57% for cleanliness of waiting area and cleanliness of the rooms respectively. The difference might be due to service given and facility factor between hospitals and health centers and the difference between urban and rural settings which might be people from urban and rural areas rate things differently(27,29,44).

Long waiting time to see health worker, convenience of health center, long waiting time spent in the facility to get services, travel time and distance from health facility were another factor associated with patient satisfaction in this study. The finding of this study revealed that those who spent more than two hours and claimed that the health facility was not convenient for them were 0.352(0.154,0.802) and 0.402(0.189,0.856) less likely to be satisfied when compared to those who spent less than 2 hours and who said the place of health facility is convenient for them. Similar study conducted in Turkey and rural china showed that long waiting time was one of the reasons for low satisfaction. Another study conducted in Armenia showed that high level of satisfaction observed was due to short waiting time. Study conducted in west showa central Ethiopia and Jimma also showed that long waiting time, travel time and convenience were the reason for low patient satisfaction (29,45,52,53).

The mean waiting time recorded to see health worker in minutes was 10.264(±4.5) and for actual consultation was 14.046(±3.78) in minutes and for OPD consultation transit time 57.4(±16.7). Furthermore 50.8% of respondents reported that they wait more than 10 minutes to get services,20.5% of respondents spent greater than two hours to get services in the facilities and 11% of respondents reported that they spent <10 minutes for consultation in examination room. On the top of that long waiting time to see health worker, long waiting time spent in the facilities were factors that are associated with patient satisfaction. However patient judgment is far from a recorded average time for waiting time and actual consultation. This is might be due to patients over estimation or underestimation time expectation. This finding is higher than study conducted in AA public hospitals by (45,46) and study conducted health centers in western shoa of central Ethiopia which showed actual consultation was 7.825(±4.78) and 14.0 (±6.73) minutes respectively. The difference might be due to facility factor, professional mix and contextual settings. However this implies the importance of sufficient consultation duration when providing satisfactory health services to patients in all settings. But this finding shows that highest waiting time greater than five minutes and OPD consultation transit time that was lower than two hours which are set as standards in National satisfaction survey of Ethiopia (38).

Similarly the mean travel time in minutes and distance from health center in Km responded by patients were 117.25(±63.016) and 15.76(±9.5) Km respectively. This was consistent with National standards in national satisfaction survey which states a patient(client) should not move more than two hours(120min) to reach health facility with a maximum distance of 10KM.But the difference in observed in distance were might be due to social desirability bias. However, both categories display a nearest point with national standards (47).

Another factors related to patient satisfaction were socio-demographic characteristics. Even though socio-demographic characters are claimed as minor predictor for satisfaction, Age in years, occupational status and payment status were associated with patient satisfaction. This study is similar to study conducted in western shoa central Ethiopia, Jimma hospital and Tigrai hospitals in which Payment status, age in years and occupational status were significantly associated with patient satisfaction. Similarly educational status, marital status and sex have not shown statistical significance with patient satisfaction. As indicated in different studies socio-demographic characteristics are minor predictor of patient satisfaction (27,29,41,45).

Strengthening this result the finding of the qualitative result of the present study showed that the lack of drugs and supplies, unavailability of basic supplies like water and electricity, low courtesy and respect from the sides of health worker were causes made patients to be dissatisfied in rural primary health care facilities. As indicated by different authors the availability of drugs in the rural health facilities brought satisfaction not only to users, but also to the providers. Similarly a qualitative study conducted in Tanzania and Ghana showed that inability to get prescribed drugs and poor attitude of some health workers causes for patient satisfaction which made patients to bypass the nearest facilities to get in favor of those facilities offering high quality of consultation and better stocked with supplies (1,43).

6.1 Limitation of the study

Social desirability bias due to the fact that facility based studies can produce more positive responses because the study was conducted in the compound of health facility.

6.2 Conclusion

The findings in this study revealed that:-

- Low level of satisfaction when compared to other studies in the country
- The satisfaction level was rated lowest for provider related characteristics and service characteristics and highest for physical characteristics
- Patient satisfaction was associated with long waiting time, travel time, availability of drugs, long waiting time to get services.
- The study also showed that lack of basic supplies like water and electricity were another problem that leads the facility not to provide enough services which is another outcome for dissatisfaction of clients.

6.3 Recommendations

- The concerned bodies including Woreda Health Office and Facilities needs to understand the extent of the problem and plan to look for different mechanisms to enable the facilities keep adequate stock of essential drugs and laboratory supplies.
- The zonal administrative and zonal health office should provide those health facilities with different basic supplies
    - Like water supplies and electricity.
    - Fulfilling human resources and standard medical equipment.
    - Establishing a regular mechanism for a technical supportive supervision to those facilities.
    - Short and long term training for staff on customer handling practice, health sector reform etc.
    - Conducting customer satisfaction survey on regular basis according to national standards.

Annexes:-

1. References and citation

1. Margaret S etal. Interpersonal and organizational dimension of patient satisfaction. Journal for Quality in Health care 2003;15(4):337-44
2. Williams B. Patient satisfaction: A valid concept? Soc Sci Med 38:509-516, 1994.
3. Gilson L, Alilio M, Heggenhougen K. Community satisfaction with primary health care services: An evaluation undertaken in the Morogoro region of Tanzania. Soc Sci Med 39:767-80, 1994.
4. Leulseged Agezew. Health Facility Governance in the Ethiopian Health System report from USAID 2011. available from www.healthsystems2020.org
5. FMOH, WBHS planning guide line final EFY 2006 Addis Ababa 2013.
6. Michael et al. Patient satisfaction in developing countries. Soc. Sci. and Med. Vol. 48.1999; 989.
7. The World Bank; A Country status report on health and poverty-Ethiopia. June 2005.
8. Hudak PL, Wright JG. The characteristics of patient satisfaction measures. Spine 2000; 25:3167-77.
9. Lewis M, Eskeland G, Traa-Valerezo X. Primary health care in practice: is it effective? Health Policy 2004 Dec; 70(3):303-25.
10. Campbell S, Roland M.O, Buetow S.A. Defining quality of care. Social Science and Medicine. 2000;51:1611-1625
11. Sitzia J, Wood N. Patient satisfaction: a review of issues and concepts. Soc Sci Med 1997;45:1829–43./1 china
12. Hudak PL, Wright JG. The characteristics of patient satisfaction measures. Spine 2000;25:3167–77.
13. Nayeri ND, Aghajani M. Patients' privacy and satisfaction in the emergency department: a descriptive analytical study. Nurs Ethics 2010;17:167–77
14. Weeks. W. Quality Improvement as an Investment. Quality Managing Health Care; 10(3), 2002
15. Chanawongse K. Understanding primary health care management: from theory to practical reality.Nakhon Phathom: Asian Institute for Health Development, Mahidol University; 1994

16. Donabedian A. The quality of care. How can it be assessed? *J Am Med Assoc,* 1988; 260:1743-48.
17. James AW. Hospital management in the tropics and subtropics; 1990.
18. Pawlikowska TRB, Nowak PR, Szumilo-Grzesik W, Walker JJ. Primary care reform: a pilot study to test the evaluative potential of the Patient Enablement Instrument in Poland. Fam Pract 2002;19:197–201
19. Wouters A.: Essential national health research in developing countries: Health care financing and the quality of care. International journal of health planning and management. Vol. 6. 1991, 253 – 71.
20. World development report, Making services work for the poor people, 2004.
21. World Health Organization. The World Health Report 2000. Health Systems. Improving Performance. World Health Organization Geneva, Switzerland 2000.
22. Samia Amin,Jishnu Das,Markus Gold stain. Are you being served? New tools for measuring service delivery. The World Bank. Washington DC 2008.Available at http://www.worldbank.org Accessed:09 July 2013
23. McPake B.: User charges for health services in developing countries: a review of the economic literature. Soc Sci and Med Vol. 36. 1993, 1397- 1405.
24. The Federal Democratic Republic of Ethiopia: HSDP, MOH, A.A 2002.
25. FMoH Health Sector Development Programme IV 2010/11 – 2014/15 Final Draft October 2010.Annual Performance Report.
26. Leulseged Agezew. Health Facility Governance in the Ethiopian Health System report from USAID 2011. available from www.healthsystems2020.org
27. Girmay A. Assessment of Clients satisfaction with Outpatient services in Tigrai Zonal Hospitals. July 2006:available from http://etd.edu.et/
28. Birna A. The quality of hospital services in eastern Ethiopia: Patient's perspective. Ethiop J Health Dev. 2006; 20:199–200.
29. Fekadu A. et al Assessment of Clients' satisfaction with health service delivery in Jimma University Specialized Hospital July 2011. Ethiop J Health Sci. Vol. 21, No. 2;106
30. Mettu Woreda Health Office Report 2012/13
31. Ilubabor Zone Health Office Report 2012/13
32. Fitzpatric R.surveys of patent satisfaction: Important Considerations. British Medical Journal(1991);302:887

33. Kahassay HM.Health centers-the future of health depend on them. World Health Forum .1998:341
34. Asadi-Lari M, Tamburini M, Gray D. Patients' needs, satisfaction, and health related quality of life: towards a comprehensive model. Health and Quality of Life Outcome 2004
35. Avis M.Bond M. Arthur A. questioning patient Satisfaction; An empirical investigation in two patient clinics. SocSci Med 44:1997
36. Surjit S.Wadhwa. Customer satisfaction and health care delivery system. The internet Journal of Nuclear M, 2002.volume 1 number 1
37. Anderson RM. Revisiting the Behavioral Model and Access to Medical Care: Does it matter? Journal of Health and Social Behavior.1995 March;36:1-10
38. Kunarantnapruck S,Boonpadoong, The study of client satisfaction towards curative Services in general Hospital,Bangkok:rachirasm;1989.
39. Williams SJ,Calnan M, Convergence and Divergence: assessing criteria of consumer satisfaction across general practice, dental and hospital Care Settings. Soc.Sci Med 1991;33(6);707-16
40. NY Net. Patient Satisfaction towards health services at The OPD clinics of Wangnumyen Community Hospital,Thailand:Mahidol University 2007.
41. Nanggore Aceh: patient Satisfaction with health services at Kuta Blang Health Center in Bireun District province, Indonesia, Mahidol University 2008.
42. Peter A. Berman.A decade of health sector reform in developing countries, 2000.
43. P. K. Turkson. Perceived Quality Of Health Care Delivery In A Rural District Of Ghana . Ghana Medical Journal, Volume 43, Number 2 June 2009.
44. Abebe etal. Levels of out patient satisfaction at selected health facilities in six regions of Ethiopia; Ethiopia J. Health Dev.2008:22(1):42-48
45. Zewdie Berhanu et al. Determinants of Satisfaction with Health Care Provider interactions at health centers in central Ethiopia: JBMC Health Service Research 2010,10:78
46. Tateke T, Woldie M , Ololo S. Determinants of patient satisfaction with outpatient health services at Public and Private Hospitals in A.A Ethiopia. Afr, :J Prm. Health Care Fam Med.2012:4(1),Art #384;11
47. FDRE, MOH, Ethiopian Hospital Reform Implementation Guidelines: Vol-2, Ethiopian Hospital Management Initiative May 2010: Version 1.0 Addis Ababa 2010.

48. Patient satisfaction questionnaires short form (PSQ).Grant N., Marshal Rants (1994): RAND publication Press 1994.Santa Monica. Available from http//order@rand.org
49. Stewart W, Margaret M, David H, and Gram C: The Consultation and rational empathy (CARE) measure: Development and preliminary validation and reliability of an empathy based consultation process. available at http://fampra.oxfordjournals.org
50. Dagnew M, D Zakus D. Community perception on OPD performance of a teaching hospital in Gondar town, Ethiopia. *Ethiop Med J Dev,* 1997, 35;153 – 160.
51. Zhihua Yan, Dai WanDAI, Li Li.Patient satisfaction in two Chinese Provinces: rural and urban differences International Journal for Quality in Health Care 2011; Volume 23, Number 4: pp. 384–389 10.1093
52. Tsovinar Harutyunyan et al. Patient satisfaction with primary care in Armenia: good rating of bad services? Health Services Management Research 2010; 23: 12–17.
53. Said Bodor Outpatient Satisfaction with Health Centers in Urban Areas. Turk J Med Sci.32 (2002) 409-414

2. Questionnaires

English version questionnaires

Jimma University, College of public Health and medical sciences Community based Training program

Patient satisfaction with outpatient services at primary health care facilities found in Mettu rural woreda, Ilubabor Zone,Oromia Region South West Ethiopia.

Introduction

Questionnaires: for interview of patient coming for medical services.

This questionnaire is prepared to gather information only for research purpose. The answer respondents give is highly valuable for the success of study. You do not need to write the name in any part of the paper; hence the respondents are anonymous and confidential.

Interviewers should:

- Begin by introducing themselves;
- Explain the objective of the interview and how the information will be used;
- Ask the clients willingness and that if she has any questions or concerns before the interview begins;
- Tale the client that if they are not willing ;the option of she/he can be with draw from the interview;
- Thank the respondents for his/her participation and time.

Part one- Socio-Demographics Characteristics

Code of patient_____

S.N	Questions	Response	code
101	Sex	1.male 2.female	
102	Current age in years		
103	Marital status	1.Single 2.Married 3.Divorced 4.widowed	
104	Educational status	1.Unable to read and write 2.Able to read and write 3.Grade 1-8 4.Grade 9-12 5.above 12	
105.	Occupational status	1. Government Employed 2.Merchant 3.Farmer 4.Student 5. Others	
106.	Payment status	1.Paying 2.Free	

Part Two: Organizational factor and Respondents Satisfaction with health services at medical OPD

Organizational characteristics			
S.N	Characteristics	Response	Code
200.	Does the health center location is convenient for you?(place were the health center built is appropriate for all community around)	1.Yes 2.No	
201	How much time it takes to you to reach the facility?(Travel time)	In hour	
202	Distance between your home and facility? (Distance from health facility)	In km	
203	How much times you visit the health facility in the past 12 months? (Frequency of visit in 12 months)	1.once 2.twice 3.three times 4.>=four times	
204.	How much time you spent to get services in the facility?	1.<2 hrs 2.2-4 hrs 3.>4 hrs	
205.	How much time you wait to get treatment card? (Waiting time for card in minutes)	1.1-9 2.10-19 3. 20-29 4.>30	
206.	Was there any laboratory procedure ordered to you?	1.Yes 2.No	If no jump to 306
207.	If yes do you get all ordered procedure in the facility?	1.Yes 2.No	
208.	Waiting time for laboratory in minutes	1.1-14 2.15-29 3. 30-44	
209.	How much time you spent in examination rooms in minutes to discuss health matter with health provider?	1.1-9 2.10-19 3. 20-29 4.>30	
210.	Do you get all prescribed drugs in the facility?	1.All,have got 2.Some,have got 3.Not at all	
Respondents Satisfaction with health services at medical OPD **Please rate how much are you agree with the following statements regarding your visits of the day**			
S.N	Statements or characteristics	Response	Code
300.	During your today's visit, Registration staffs and other supportive treated you with Courtesy and respect.(The way staffs treating you in a very friendly and courteous	5.Strongly agree 4. Agree 3.Neutral	

	manner or seeming genuinely concerned and respecting you as a whole person)	2.Disagree 1. Strongly disagree	
301.	During your today's visit, health care provider treated you with Courtesy and respect.(The way health care provider treating you in a very friendly and courteous manner, or seeming genuinely concerned, respecting you as a whole person and showing care and compassion)	5.Strongly agree 4. Agree 3.Neutral 2.Disagree 1. Strongly disagree	
302	During your toddy's visit , health care provider listened carefully to you.(paying close attention to what you were saying: not looking at the notes or giving you a time to fully describe your condition in your own words; not interrupting, rushing or diverting you)	5.Strongly agree 4. Agree 3.Neutral 2.Disagree 1. Strongly disagree	
303	During your today's visit, health workers explained things in a way you could understand (helpfulness of staffs in the facility in locating all the rooms for registration, examination, lab., and drug dispensing etc)	5.Strongly agree 4. Agree 3.Neutral 2.Disagree 1. Strongly disagree	
304	During your today's visit health care provider keep/maintain your privacy appropriately. (letting others to go to outside if they are in rooms or private room, using curtained screen etc)	5.Strongly agree 4. Agree 3.Neutral 2.Disagree 1. Strongly disagree	
305	During your today's visit health care provider provided you full Information about your diseases and told you about ways of prevention of future recurrence and make a plan of action with you(the options, involving you in decisions as you want to be involved; not ignoring your view)	5.Strongly agree 4. Agree 3.Neutral 2.Disagree 1. Strongly disagree	
306.	During Your today's visit you are satisfied with availability of drugs in this facility.	5.Strongly agree 4. Agree 3.Neutral 2.Disagree 1. Strongly disagree	
307.	No overcrowding in the queue process of waiting area	5.Strongly agree 4. Agree 3.Neutral 2.Disagree 1. Strongly disagree	
308.	Waiting area is Clean, comfortable	5.Strongly agree 4. Agree 3.Neutral 2.Disagree 1. Strongly disagree	
309.	Sitting chairs and equipments are available at waiting area(no broken chairs and tables)	5.Strongly agree 4. Agree 3.Neutral 2.Disagree 1. Strongly disagree	
310.	Health facility rooms are Clean	5.Strongly agree	

		4. Agree 3.Neutral 2.Disagree 1. Strongly disagree	
311.	Health care facility rooms are enough in keeping my privacy	5.Strongly agree 4. Agree 3.Neutral 2.Disagree 1. Strongly disagree	
312.	The toilet of health center was clean	5.Strongly agree 4. Agree 3.Neutral 2.Disagree 1. Strongly disagree	
313.	The delivery of health services you received today at all in the facility includes quality of care and services received are satisfying your needs.	5.Strongly agree 4. Agree 3.Neutral 2.Disagree 1. Strongly disagree	
314.	I have recommended this health facility to someone else in the future	5.Strongly agree 4. Agree 3.Neutral 2.Disagree 1. Strongly disagree	
315.	Do you have any comments or suggestion to improve the quality of health service at the OPD?----------		

Time recorded by data collectors			
S.N	Question	response	
316.	Waiting time recorded to see health worker	In minutes	
317	Actual consultation recorded	in minutes	
318.	OPD consultation transit time recorded	In hours	

Themes for Focus Group Discussion

1. Topic1.Courtesy and respect, information provision by Health workers and all other staffs
2. Topic2 .laboratory and drug availability
3. Topic3. Cleanliness of the rooms and availability of equipment in the waiting area
4. Topic 4 Major factors that contribute to the dissatisfaction of client

A fan Oromo version Questionnaires

Yuniversiti Jimmatti ,Kolleeji Fayyaa Hawaasaa fi Sayinsii Waldhansaa Sagantaa Hawaasa Bu'urrefatee.
Gaffannoo ,Qo'annoo fi Qorannoo itt qufinsa maamilaa tajaajilamuuf gara buufata fayyaa Guddattuu kutaa deddebi'ani yaaluu dhufanii sakkata'uuf Qopha'ee.Anaa Mattu ,G/I/A/Boraa,Nannoo Oromiya,Kibba Lixa Ithiyophiyaa.

Seensa

Gaafanno: Dhukkubsatoota yaala argachuuf gara bufata fayyaa dhufanif qophaa'ee.

Gaaffannon kun yaada maamila qo'annof qorranoodhaaf guruuf qopha'ee.Deebiin maamiltonni kennan galma gahinsa qo'anno kanaatif murtessaadha.Sababa iccititin kan ka'ee maqaa maamillaa barresuun dhorkaadha.

Gaafataan:

- Of beeksisuun jalqabuu;
- Faayidaa gaaffifi deebiif akkasaums qoranno kanaa ni ibsuuf;
- Itti ansees fedhi maamila gafachuun yoo feedha hin qabaanne dhisuu akka danda'aan maamilatti himuun gaafifi deebi egaluu.
- Dhuma irrattis maamila feedhi isaanitiif yeroo isaanitif galatefachuun xumuru.

Kutaa Tokko: Haala wali gala maamila

T.L	Gaaffii	deebii	koodii
101	Saala	1.dhiira 2.dhalaa	
102	Umurii		
103	Haala ga'ilaa	1.kan hinfune/hin erumnee 2.kan fudhe/herumtee 3.kan hiktee/hikee 4.kan lubbun hinjirree	
104	Sadarkaa barnootaa	1.kan hin barannee 2.barressuf dubbiduu kan danda'an 3.kutaa 1-8 4.kutaa 9-12 5.kutaa 12 ol	
105.	Haala hojii	1.mindeefamaa 2.daldaalaa 3.qonnaan bulaa 4.barataa 5.kan biro_____	
106.	Manaa kaase hanga b/fayya dhufan sa'atii fudhatu	Sa'aatidhaan	
107.	Fageenya mana fi b/fayyaa giddu jiru	km	
108	Ji;ota darban 12'n kessa yeroo meeqa mana yaala dhufatan	1.si'aa tokko 2.si;aa lama 3.si'aa sadii 4.si'aa afurif isaa ol	
109.	Haal dhukkubsatta	1.haraa 2.deddebii	
110	Haala kaffaltii	1.kan kaffalee 2.tolaa	

Kutaa Lama: itti qufinsa maamila kenninsa tajaajila fayyaa irratti

Daawwannaa guyyaa har'aa irratti hundaa'uun yaadoota armaan gadii irratti hunda'uun itti quufinsa keessan tilmaama

T.L	Yaadoota himaan dhiyaatan	deebii	kodii
Amaloota hojjetota fayyaatiin walqabtee kan jiran			
200.	Kabajani hojetaan mana galmee natti agarsisee	1.irratti walii galaa 2.wain gala 3.yaada hin qabu 4.irati wali hin galuu 5.bayye wali hingalu	
201.	Kabajani hojetaan ogeessa yaala natti agarsisee	1.irratti walii galaa 2.wain gala 3.yaada hin qabu 4.irati wali hin galuu 5.bayye wali hingalu	
202	Tajaajila har'a argadhe irratii ogessoni yaala haala gaarin na dhagefataniru	1.irratti walii galaa 2.wain gala 3.yaada hin qabu 4.irati wali hin galuu 5.bayye wali hingalu	
203	Tajaajila har'a irratti ogessonni yaala waa hunda akka naaf galuti naa ibsaniru	1.irratti walii galaa 2.wain gala 3.yaada hin qabu 4.irati wali hin galuu 5.bayye wali hingalu	
204	Tajaajila har'a irratti ogessonni yaala kophuma koo sirrtti naaf eganiruu	1.irratti walii galaa 2.wain gala 3.yaada hin qabu 4.irati wali hin galuu 5.bayye wali hingalu	
205	Gorsii ogeessa fayyaan naaf kenname(waa'ee dhukkuba kooti,haalan gara fulduratti ofirra ittisuu)	1.irratti walii galaa 2.wain gala 3.yaada hin qabu 4.irati wali hin galuu 5.bayye wali hingalu	
Haala adeemsa hojiif qulqulina			
S.N	Questions	Responses	code
300	Bakki bufatni kun itti ijaarame hunda galeessa jettani yaaddu?	1.eyye 2.lakki	
301	Sa'aatiin atii moraa kessati dabarsitee meeqa ta'a?	1.sa'atii <1 2.sa'ati 2-4 3.sa'ati 4 ol	
302	Dhiiga ykn sagaraa akka keenitan ajajmtanituu?	1.eeyyee 2. lakkii	
303	Eyye yoo ta'ee tajaajila gutu argattanitu	1.eeyyee 2. lakkii	
304	Yeroon tajaajila laboratory argachuf ege meeqa ta'aa jettani yaaddu	1.1-14 2.15-19 3.30-44	
305	Yeroon kaardii baasuuf egee meeqa ta'aa jettani yaaddu	1.1-9 2.10-19 3.20-29 4.>30	
306	Sa'atiin ati ogessa fayyaa waliin kutaa yaala turtee hammam	1.1-9	

	ta'aa	2.10-19 3.20-29 4.>30	
307	Tajaajila har'aa irratti Dawaan siinif ajajamera?	1.eyye 2.lakki	
308	Dawaa siif ajajame hunda argatettaa	1.eye hunda argadhera 2.yaraa argadhera 3.hunduma hin argane	
309	Dawaan moraa kana kessa jiru ga'aadha	1.irratti walii galaa 2.wain gala 3.yaada hin qabu 4.irati wali hin galuu 5.bayye wali hingalu	
310	Haalii dura duba maamila bakka turti tajaajila argachuf teessan mijataa dha,namni akkuma dhufen kessumesama	1.irratti walii galaa 2.wain gala 3.yaada hin qabu 4.irati wali hin galuu 5.bayye wali hingalu	
311.	Qulqulina bakka turtii (mijataa, tesso ga'a fi kan hin cabne, wacni kan hin qabne dha)	1.irratti walii galaa 2.wain gala 3.yaada hin qabu 4.irati wali hin galuu 5.bayye wali hingalu	
312.	kutaaleen moraa kana Qulquludha(kutaa yaalaa,labratori)	1.irratti walii galaa 2.wain gala 3.yaada hin qabu 4.irati wali hin galuu 5.bayye wali hingalu	
313.	kutaaleen moraa kana kessaa kophummaa koo haala gaarin naaf eguu.	1.irratti walii galaa 2.wain gala 3.yaada hin qabu 4.irati wali hin galuu 5.bayye wali hingalu	
314.	Haalli Qulqulinna moraa kana baayye gaaridha	1.irratti walii galaa 2.wain gala 3.yaada hin qabu 4.irati wali hin galuu 5.bayye wali hingalu	
315	Haalli Qulqulinna mana fincani bufata kanaa kana baayye gaaridha	1.irratti walii galaa 2.wain gala 3.yaada hin qabu 4.irati wali hin galuu 5.bayye wali hingalu	
317	tajaajla fayyaa har'a argadhe(si'ataa,kan deddebi hinqabne ta'unsaa)	1.bayye natti toleraa 2.natti toleraa 3.yaada hinqabu 4.natti hin tollee 5.bayyee natty hintolle	
318.	Bufata fayyaa kana namootni naanno kee jiraniif akka jarri gara kana dhufan nii filataafi?	1.tasa hin filadhu 2. waanan filadhu natty hin fakkatu 3.filachu nan danda'aa 4.sirritti nan filadh	
319	Qulqulina fitajaajila bufata kanaa foyyessuf yaadni isiin dabalataan laattan ni jira		

Tsa’aatii nama yaada guruun safaramu			
T.L	gaaffanno	deebii	
320.	Sa’aati ogessa yaala arguuf egee	daqiaqadhan	
321.	Sa’atii gorsaaf ogessa yaala waliin ture	daqiaqadhan	
322.	Sa’aati maammilli dabarsee kan safarame	Sa’aatidhaan	